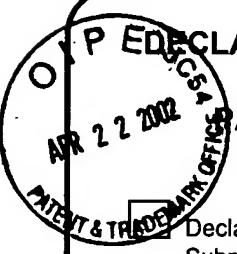


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PTO/SB/01 (10-01)
113

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 <p align="center">DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)</p> <p>Declaration Submitted with Initial Filing <input type="checkbox"/> Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)</p> <p>OR</p>	Attorney Docket Number 2000-IP-001848 First Name Inventor Ronald E. Sweatman COMPLETE IF KNOWN Application Number 10/082,459 Filing Date 02/25/2002 Art Unit 1712 Examiner Name unknown
---	--

As the below named inventor, I hereby declare that:

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original and first inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**Methods of Discovering and Correcting Subterranean Formation Integrity Problems
During Drilling**

(Title of the Invention)

the specification of which

is attached hereto

OR

was filed on (MM/DD/YYYY) 02/25/2002 as United States Application Number or PCT International

Application Number 10/082,459 and was amended on (MM/DD/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or (f), or 365(b) of any foreign application(s) for patent, inventor's or plant breeder's rights certificate(s), or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent, inventor's or plant breeder's rights certificate(s), or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached? YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

[Page 1 of 2]

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

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DECLARATION — Utility or Design Patent Application

Direct all correspondence to: Customer Number
or Bar Code Label OR Correspondence address below

Name Address City State ZIP Country Telephone Fax

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR : A petition has been filed for this unsigned inventor

Given Name	Ronald E.	Family Name	Sweatman
(first and middle [if any])		or Surname	

Inventor's
Signature

4 - 1 - 02
Date

Montgomery
Residence: City

Texas
State

U.S.
Country

U.S.
Citizenship

Mailing Address 163 Lakeside Drive

Montgomery
City

Texas
State

77356
ZIP

U.S.
Country

NAME OF SECOND INVENTOR: A petition has been filed for this unsigned inventor

Given Name	Richard F.	Family Name	Vargo, Jr.
(first and middle [if any])		or Surname	

Inventor's
Signature

4-3-02
Date

Katy
Residence: City

Texas
State

U.S.
Country

U.S.
Citizenship

Mailing Address 2142 Brinton Oaks Court

Katy
City

Texas
State

77450
ZIP

U.S.
Country

Additional inventors are being named on the 1 supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.



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DECLARATION

**ADDITIONAL INVENTOR(S)
Supplemental Sheet
Page 1 of 1**

Name of Additional Joint Inventor, if any:

A petition has been filed for this unsigned inventor

Given Name **David S.**

Family Name or Surname **Kulakofsky**

Inventor's Signature

Date **04/02/02**

Residence: City **Katy**

State **Texas**

Country **U.S.**

Citizenship **U.S.**

Mailing Address **5715 Ashley Spring Court**

Mailing Address

City **Katy**

Texas State

77494 ZIP

U.S. Country

Name of Additional Joint Inventor, if any:

A petition has been filed for this unsigned inventor

Given Name **Alvaro**

Family Name or Surname **Escoria**

Inventor's Signature

Date **4-2-2002**

Residence: City **Sugarland**

Texas State

U.S. Country

U.S. Citizenship

Mailing Address **4114 Ivy Mist Court**

Mailing Address

City **Sugarland**

Texas State

77479 ZIP

U.S. Country

Name of Additional Joint Inventor, if any:

A petition has been filed for this unsigned inventor

Given Name **Krishna M.**

Ravi

Family Name or Surname

Inventor's Signature

Date **April 04, 02**

Residence: City **Kingwood**

Texas State

U.S. Country

U.S. Citizenship

Mailing Address **P.O. Box 5622**

Mailing Address

City **Kingwood**

Texas State

77345 ZIP

U.S. Country

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



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**POWER OF ATTORNEY OR
AUTHORIZATION OF AGENT**

Application Number	10/082,459
Filing Date	February 25, 2002
First Named Inventor	Ronald E. Sweatman
Title	Methods of Discovering .
Group Art Unit	1712
Examiner Name	unknown
Attorney Docket Number	HES 2000-IP-001848

I hereby appoint:

Practitioners at Customer Number

OR

Practitioner(s) named below:



PATENT TRADEMARK OFFICE

Label here
28857

Name

Registration Number

see attached

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

The above-mentioned Customer Number.

OR

Practitioners at Customer Number

Place Customer
Number Bar Code
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OR

Firm or
Individual Name

Address

Address

City

State

Zip

Country

Telephone

Fax

I am the:

Applicant/Inventor.

Assignee of record of the entire interest. See 37 CFR 3.71.
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

SIGNATURE of Applicant or Assignee of Record

Name	Craig W. Roddy
Signature	
Date	7/4/02

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

*Total of _____ forms are submitted.

Burden Hour Statement: This form is estimated to take 3 minutes to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →

PTO/SB/02C (3-07)

Approved for use through 03/09. GMB 0911-0032

Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a
valid OMB control number.

DECLARATION		REGISTERED PRACTITIONER INFORMATION (Supplemental Sheet)	
Name	Registration Number	Name	Registration Number
Halliburton Energy Services, Inc. Practitioners		McAfee & Taft Practitioners	
William E. Shull	29,438	C. Clark Dougherty, Jr.	24,208
Michael D. McCully	29,566	Clifford C. Dougherty, III	31,607
Mark A. Smith	30,220	E. Harrison Gilbert, III	29,156
William M. Imwalle	35,904	Neal R. Kennedy	31,383
Paul I. Herman	37,349	Michael J. LaBrie	39,507
Robert A. Kent	28,626	Anthony L. Rahhal	37,562
Craig W. Roddy	36,256	Jean L. Pinkston	45,014
John W. Wustenberg	35,415	William D. Hall	35,535

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual user. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20531. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20531.

Declaration — Registered Practitioner Information (Supplemental Sheet) (PTO/SB/02C)(1-14)



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PTO/SB/96 (08-00)

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STATEMENT UNDER 37 CFR 3.73(b)

Applicant/Patent Owner: Ronald E. Sweatman et al.

Application No./Patent No.: 10/082,459 Filed/Issue Date: February 25, 2002

Entitled: Methods of Discovering And Correcting Subterranean Formation ...

Halliburton Energy Services, Inc corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. the assignee of the entire right, title, and interest; or
2. an assignee of less than the entire right, title and interest.
The extent (by, percentage) of its ownership interest is _____ %

in the patent application/patent identified above by virtue of either:

A. [x] An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

OR

B. [] A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
2. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.
3. From: _____ To: _____
The document was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

[] Additional documents in the chain of title are listed on a supplemental sheet.

[x] Copies of assignments or other documents in the chain of title are attached.

[NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

4-8-2002

Date

Craig W. Roddy

Typed or printed name

Signature

Counsel

Title

ASSIGNMENT

Whereas, I/We, Ronald E. Sweatman, of Montgomery County, Montgomery, Texas; Richard F. Vargo, Jr., of Harris County, Katy Texas; David S. Kulakofsky, of Harris County, Katy, Texas; Krishna M. Ravi, of Harris County, Kingwood, Texas, and Alvaro Escoria, of Fort Bend County, Texas, have invented METHODS OF DISCOVERING AND CORRECTING SUBTERRANEAN FORMATION INTEGRITY PROBLEMS DURING DRILLING for which I have made application for Letters Patent of the United States; and

Whereas, HALLIBURTON ENERGY SERVICES, INC., a Delaware Corporation, having a place of business at 10200 Bellaire Boulevard, Houston, Texas 77072 is desirous of acquiring an interest therein;

NOW, THEREFORE, in consideration of the sum of ten dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We, by these presents do sell, assign and transfer and convey unto HALLIBURTON ENERGY SERVICES, INC., its successors and assigns, the full and exclusive right, for the United States of America and its territorial possessions and for any and all foreign countries, in and to the said invention, described in the Patent Application serial number 10/082,459, filed on February 25, 2002, and any divisional, continuing or reissue application based on the present application preparatory to obtaining Letters Patent of the United States therefor; said invention, application and any and all Letters Patent issuing therefor to be held and enjoyed by HALLIBURTON ENERGY SERVICES, INC., for its own use and behoof, and for its legal representatives, successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me and had this assignment and sale not been made.

And I do further agree to sign all papers, make all rightful oaths and do all requisite acts for the filing of any disclaimer or for the filing and assignment of any divisional, continuing or reissue application or applications for patent based on the present application, as well as for any other U.S. or foreign application for patent which relates to the said invention.

And I do further agree to communicate to HALLIBURTON ENERGY SERVICES, INC., its successors, assign or other legal representatives, such facts relating to the invention disclosed in the present application or Letters Patent issuing thereon as may be known to me, and to testify as to such facts in any interference or other litigation.

Executed this 1st day of April, 2002, at Houston, Harris County, Texas,
U.S.A.

Ronald E. Sweatman

Ronald E. Sweatman

State of Texas)
)
County of Harris) ss
)

Before me personally appeared said Ronald W. Sweatman and acknowledged the foregoing instrument to be his free act and deed this 1st day of April, 2002.

Seal



Kristin R. Majewski

(Notary Public)

My Commission Expires: June 12, 2004

Executed this 3rd day of April, 2002, at Houston, Harris County, Texas,
U.S.A.

Richard F. Vargo, Jr.

Richard F. Vargo, Jr.

State of Texas)
)
County of Harris) ss
)

Before me personally appeared said Richard F. Vargo, Jr. and acknowledged the foregoing instrument to be his free act and deed this 3rd day of April, 2002.

Seal

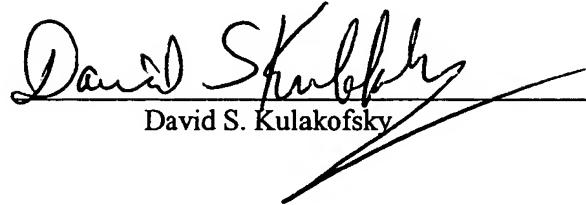


Kristin R. Majewski

(Notary Public)

My Commission Expires: June 12, 2004

Executed this 1st day of April, 2002, at Houston, Harris County, Texas,
U.S.A.

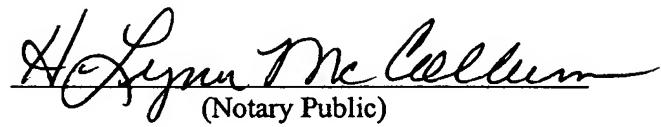

David S. Kulakofsky

State of Texas)
)
County of Harris) ss

Before me personally appeared said David S. Kulakofsky and acknowledged the foregoing
instrument to be his free act and deed this 2nd day of April, 2002.

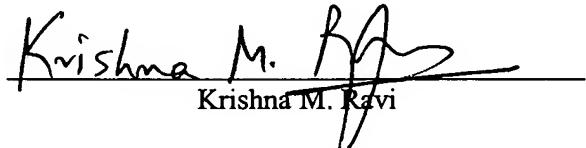
Seal




(Notary Public)

My Commission Expires: 04-09-2005

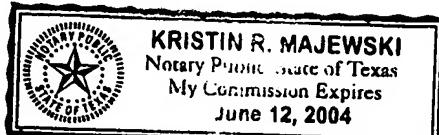
Executed this 4th day of April, 2002, at Houston, Harris County, Texas,
U.S.A.

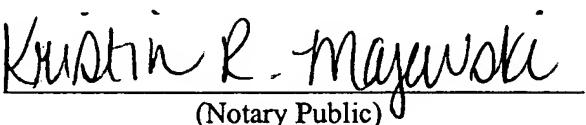

Krishna M. Ravi

State of Texas)
)
County of Harris) ss

Before me personally appeared said Krishna M. Ravi and acknowledged the foregoing instrument
to be his free act and deed this 4th day of April, 2002.

Seal




(Notary Public)

My Commission Expires: June 12, 2004

Executed this 2 day of APRIL, 2002, at Houston, Harris County, Texas,
U.S.A.

Alvaro Escoria

State of Texas)
)
County of Harris) ss

Before me personally appeared said Alvaro Escoria and acknowledged the foregoing instrument
to be his free act and deed this 2nd day of April, 2002.

Seal



H. Lynn McCollum
(Notary Public)

My Commission Expires: 04-09-2005